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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,894	06/01/2006	Katri Keski-Nisula	PLA078-820714	7027
21831 7590 06/30/2008 WOLF BLOCK SCHORR AND SOLIS-COHEN LLP 250 PARK AVENUE NEW YORK, NY 10177			EXAMINER PATEL, YOGESH P	
			ART UNIT 3732	PAPER NUMBER
			NOTIFICATION DATE 06/30/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO@WOLFBLOCK.COM

<b>Office Action Summary</b>	<b>Application No.</b> 10/563,894	<b>Applicant(s)</b> KESKI-NISULA ET AL.	
	<b>Examiner</b> YOGESH PATEL	<b>Art Unit</b> 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) 24 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

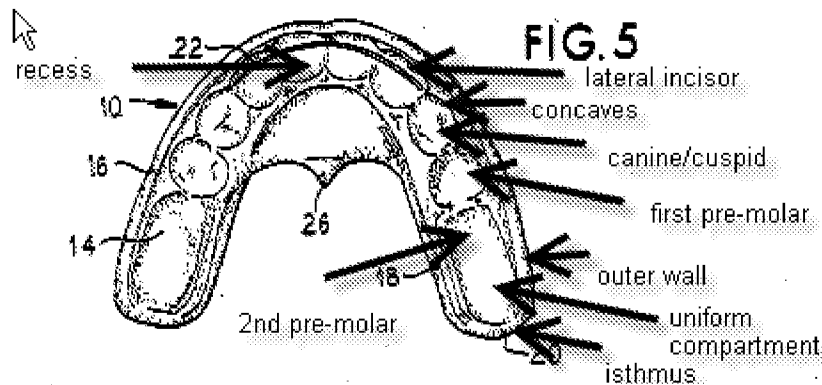
### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1- 6, 10, 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (4,784,605) in view of DeLuke (6,837,246).

Bergersen discloses an orthodontic device for guiding the occlusion of an individual, the device including a generally U-shaped arch made of flexible material (col. 3, lines 13-16) and that has a lower surface on the lower jaw side and an upper surface on the upper jaw side, and in both of which there are concaves for receiving the individual's teeth (col. 2, lines 35-40), the bottoms of the concaves forming an isthmus which separates the concaves from one another, wherein the isthmus includes blanks intended for individual teeth and uniform, continuous recesses (e.g. trough) for at least two teeth to guide the teeth in the desired direction.



Bergersen fails to disclose a lower wing reaching the immediate proximity of the mouth cavity, extending lower than the corresponding outer wall, shape of lower arch, reducing the at point of the ligament of the tongue and outer wall on the upper jaw side surface partially continued upwards.

DeLuke teaches the inner wall on the lower jaw side surface being continued so that it is at least essentially aligned downwards to the wall surface in such a way that it extends lower than the corresponding outer wall to form the lower wing (fig. 1-3), further, the wing has been arranged so as to reach the immediate proximity of the base of the mouth cavity (fig. 1). DeLuke further teaches shape of the lower wing, particularly in the molar area, follows essentially the shape of the lower side jaw arch (fig. 1); and the downwards dimension of the wing has been reduced at the point of the ligament of the tongue (fig. 1). DeLuke does not explicitly teaches lower wing extends approximately at the point of the first molar to a distance of 14 mm as a maximum of the down side surface of the isthmus, in which case the distance is approximately 3 to 6 mm smaller in the area of the ligament of the tongue, however the figures clearly shows that the wing is reduced at the point of the ligament of tongue. If the wing is not reduced

at the point of the ligament, then it would be difficult to maintain the appliance in the mouth. Regarding claims 15-17 DeLuke teaches the outer wall 14 on the upper jaw side surface has been continued upwards to the wall surface in such a way that it extends above the gum line, and in relevant range because if measured from the isthmus to the top surface of the appliance is too large, then the appliance would be inappropriate for the user because there would no passage for saliva to exit the appliance. Further the size of the appliances corresponds to increasing the width and the height of the dental arch to make appropriate for young children thru adults (end of col. 2 to col. 3), thus outer wall is also increased in terms of height for adult users. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Bergersen by providing the wing of DeLuke in order to enhance retention of the appliance into the user's mouth and to encourage users to breath through the nose, and which can serve as a diagnostic aid or test device to access a patient's problems (summary of the invention).

2. Claim 7-9 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen'605 in view of DeLuke as applied to claim 1 above, and further in view of Bergersen (Pat. 5,645,420).

Bergersen'605/DeLuke disclose all elements of the claimed invention, and further disclose different size ranges (Bergersen, col. 2, lines 38-40) except for a thickness of the isthmus.

Bergersen '420 teaches the variation of the isthmus thickness for the correction of the overbite can be accomplished either by reducing the thickness in the area of the posterior teeth or increasing the thickness in the area of the anterior teeth (col. 6-7). Similarly, by increasing the thickness of the isthmus in the posterior region relative to the anterior region, an open bite can be corrected. The variation in thickness of the isthmus occurs in step because the thickness is different in anterior and posterior portions. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Bergersen/DeLuke by providing a varying thickness of the isthmus of the device as taught by Bergersen'420 in order to correct open bite/overbite problems (col. 6, lines 49-67 and col. 7, lines 19-42).

Regarding the size of the appliance, the dental structure of users (e.g. dentition) varies in sizes depending on particular users' age. For example, if the user is 15 years old, then the length of the compartment would be lesser than the compartment length for user that is older than specified age and vise versa. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Bergersen/DeLuke by providing the appliance in variety of sizes (e.g. as claimed) so that large group of users may benefit from correcting open-bite tendencies and tongue thrust problems using the appliance.

### ***Response to Arguments***

3. Applicant's arguments filed 05/21/08 have been fully considered but they are not persuasive. Applicant argues that the lower wing is arranged to reach the immediate proximity of the base of the mouth cavity; however, the lower wing of DeLuke is capable

of reaching the base of the mouth cavity. Applicant further argues that Applicant's wing is generally **vertically downwards** close to the base of the mouth cavity; however this limitation is not claimed. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, Applicant argues that DeLuke has nothing to do with orthodontics. The Examiner respectfully disagrees because the appliance of DeLuke used in dentistry and the lower wing is indistinguishable from the claimed invention. **Applicant is advised to use more structural limitation in the claim to distinguish over DeLuke.**

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case there is no explicit teaching for combining DeLuke with Bergersen as Applicant's invention. However, the examiner provides motivation for different reasons, not specifically as applicant's invention.

### ***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH PATEL whose telephone number is (571)270-3646. The examiner can normally be reached on 8:00 to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez can be reached on 571-272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. P./  
Examiner, Art Unit 3732

/Cris L. Rodriguez/  
Supervisory Patent Examiner, Art Unit 3732